

1-506-65 EWA(k)/FBD/ENG(r)/EWI(1)/EEC(k)-2/EEC(t)/T/EEC(b)-2/EWP(k)/EWA(R)-2/  
 Po-4/Pf-4/Pg-4/Peb/P1-4/P1-4 SCTB/LJP(c) WG/LHB/GG  
 UR/0181/65/007/005/1506/1516

ACCESSION NR: AP5012506

AUTHOR: Kazarinov, R. F.; Konstantinov, O. V.; Perel', V. I.; Efros, A. L.

TITLE: Electromagnetic theory of the injection laser

REF: Fizika tverdogo tela, v. 7, no. 5, 1965, 1506-1516

PI TAGS: laser, injection laser, junction laser, semiconductor laser, stimulated emission, radiative recombination, active medium

ABSTRACT: The authors investigated the angular distribution of stimulated emission from a laser diode and calculated the quantum yield coefficient  $\gamma$  (defined as the ratio of emitted power to power generated in the active region by radiative recombination). Known results for the amplitudes of the field vectors in the n- and p-regions for the TE and TM modes of propagation are summarized. These expressions are then used to derive two different expressions for  $\gamma$  and show that for the TE and TM modes of propagation  $\gamma$  is given by the same formulas. The quantum yield as a function of the angle in the plane perpendicular to the junction is calculated as a product of two Lorentzian curves. The width of these profiles depends on the penetration depth of the field in the n- and p-regions. If the profiles are sufficiently far apart, two maxima, corresponding to emission from the

Card 1/2

L 45566-65

ACCESSION NR: AP5012566

p- and n-regions, will be present in the angular distribution of the energy flux. Physically, the presence of two peaks is associated with the components of the wave vector in the p- and n-regions which are perpendicular to the plane of the ... It is shown that the angular distance between the peaks determines the ... the active region. Orig. art. has: ...

... Fiziko-tekhnicheskiy institut im. A. F. Ioffe AN SSSR, Leningrad  
... Technical Institute, AN SSSR)

EXAMINER: 31Dec64

ENCL: 00

SUB CODE: EC

OTHER: 012

REF PRESS: 4001

Card 2/2

L 00541-66 EWT(1)/T LJP(c)  
ACCESSION NR: AP5019221

UR/0056/65/049/001/0097/0106

AUTHORS: Aleksandrov, Ye. B.; Konstantinov, O. V.; Perel', V. I. 44.55 44.55 44.55

TITLE: Optical orientation of atoms in a magnetic field perpendicular to the beam 21, 44, 55 56 53 B

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 49, no. 1, 1965, 97-106

TOPIC TAGS: magnetic moment, molecular beam, beam modulation, gas laser

ABSTRACT: The authors investigate theoretically and experimentally a new method of orienting gas atoms in a magnetic field perpendicular to an orienting light beam. This is done by using an alternating magnetic field in addition to a constant one, and modulating the alternating field while maintaining the beam intensity constant. It is shown theoretically that if the alternating field makes a

Card 1/3

L 00541-56

ACCESSION NR: AP5019221

small angle with the constant field, then the resultant moment precesses about the constant field and produces large constant components of the magnetic moment in the directions of the magnetic field and of the light. The theory of the process is briefly developed and expressions are derived for the total moment and its projections. To check on the theory, experiments were made on the dc and ac components of the moment projections on the light beam and on the constant field in the vicinity of the first resonance. The experiments were made with a mixture of cesium vapor and argon, using an orienting beam which was circularly polarized and contained only one long-wave component of the resonant doublet. A cesium electrodeless discharge spherical lamp served as the source. The experiment setup is described. The test results are found to be in satisfactory agreement with the theory. Plots were obtained of the depth of modulation of light on the amplitude of the alternating field, of the dc components of the moment against the constant field, and of the resonant broadening by the alternating field. Orig. art.

Card 2/3

L 00541-66

ACCESSION NR: AP5019221

has: 6 figures and 16 formulas.

ASSOCIATION: Gosudarstvennyy opticheskiy institut im. S. I.  
Vavilova (State Optical Institute) *44.55*

SUBMITTED: 16Feb65

ENCL: 00

SUB CODE: OP

NR REF SOV: 002

OTHER: 004

*mlr*  
Card *3/3*

L 46829-66 EWT(1)/T IJP(c) AT

ACC NR: AP6015465

SOURCE CODE: UR/0181/66/008/005/1467/1478

4/  
B

AUTHOR: Konstantinov, O. V.; Efros, A. L.

ORG: Physics Engineering Institute im. A. F. Ioffe, AN SSSR, Leningrad (Fiziko-tekhnicheskiy institut AN SSSR)

TITLE: A strong injection in a nondegenerate <sup>2/</sup>p-n transition

SOURCE: Fizika tverdogo tela, v. 8, no. 5, 1966, 1467-1478

TOPIC TAGS: pn transition, hole injection, nondegenerate transition, volt ampere characteristic

ABSTRACT: The authors discuss the approximate solution obtained by them to describe the entire process of concentration of injected holes. This solution holds true when the drift length is substantially greater than the diffusion length. The problem of the voltage drop in the transition ( $\delta\psi$ ) itself is also discussed. The solution obtained is more accurate than the drift approximation due to C. Herring (Bell Syst. Tech. J., 28, 401, 1949). A relationship is found between the injected concentration and the current and the volt-ampere characteristic of such a diode. In conclusion the authors wish to express their sincere gratitude to B. V.

Card 1/2

L 41599-66 EWT(1)/T IJP(c) AT

ACC NR: AF6018552

SOURCE CODE: UR/0181/66/008/006/1866/1877

AUTHOR: Konstantinov, O. V.; Tsarenkov, G. V.

ORG: Physicotechnical Institute im. A. F. Ioffe, AN SSSR, Leningrad (Fiziko-  
tekhnicheskiy institut AN SSSR)

TITLE: Recombination waves in a bounded sample

SOURCE: Fizika tverdogo tela, v. 8, no. 6, 1966, 1866-1877

TOPIC TAGS: electron recombination, semiconductor carrier, carrier density, minority carrier, semiconductor plasma

ABSTRACT: This is an extension of earlier work by one of the authors (Konstantinov, with V. I. Perel', FTT v. 6, 3365, 1964) dealing with the natural recombination waves produced in semiconductors with two types of current carriers upon deviation of the free-carrier density from equilibrium. Whereas the earlier study was devoted to unbounded semiconductors or to annular semiconductors without contacts, the present paper deals with samples of finite lengths and with ohmic contacts (ohmic in the sense that any deviation of the carrier density from equilibrium is equal to zero). It is shown that when the carrier drift in a constant electric field exceeds a certain critical value, corresponding to a certain critical field, the natural oscillations are produced; formulas are given for the critical field and for the critical frequency. If the sample length exceeds the diffusion length of the minority carriers, a second class of oscillations is produced, called almost-natural oscillations, which do not

Card 1/2

Card 2/2

KONSTANTINOV, O.Ya., insh.

• New high-duty "corn-type" cutters: Mashinostroitel' no. 1:37-40  
Ja '59. (MIRA 12:2)

(Metal-cutting tools)



25(2)

SOV/117-59-3-6/37

AUTHOR: Konstantinov, O.Ya., Engineer

TITLE: The Modernization of Face Grinding Machines (Moderni-  
zatsiya ploskoshlifoval'nykh stankov)

PERIODICAL: Mashinostroitel', 1959, Nr 3, pp 9 - 12 (USSR)

ABSTRACT: There are about 50 types of face grinders in use in the USSR, of home and foreign make, the horizontal-spindle "SK-371" and "371-M" grinders of the Moscow, Vitebsk and Zlatoust machine tool plants being the most widely used. The modernization described concerns the design of the spindle assembly in the last mentioned grinders, i.e. of the element that is mainly responsible for the accuracy and the finish of the ground work. The old design (Figure 1) made the adjustment of the spindle bearing extremely difficult. The alignment of the front and the rear spindle support was also very difficult, and the assembling and dismantling of the unit was unduly complex. The best solution was the spindle

Card 1/2

SOV/117-59-3-6/37

The Modernization of Face Grinding Machines

assembly design (Figure 2) with ball bearings, devised by the locksmith, B.T. Gel'berg, of the Leningradskiy zavod poligraficheskikh mashin - "Lenpoligrafmash" (the Leningrad Printing Machine Plant) that was tested at the chair "Technology of Machine-building" of the Leningradskiy inzhenerno-ekonomicheskii institut (Leningrad Engineering-Economics Institute). The article also deals with the causes of surface waviness occurring in the face grinders "SK-371". It was revealed that the real cause was the insufficient removal of clogged and blunted abrasive material from the surface of the grinding wheel while setting it. It was observed that the plants set grinding wheels by removing only 0.05 to 0.3 mm from the surface, and as a result spots are left on the circumference of the wheel which develop to spots of different hardness or different cutting capacity. These leave regularly spaced waves on the work surface. There are 4 sets of drawings, 1 set of graphs and 1 set of photographs.

Card 2/2

KONSTANTINOV, O. Ya., inzh.

Fine straightening of wheels for flat-surface grinding. Trudy LBI  
no. 3:32-46 '60. (MIRA 13:10)

(Grinding and polishing)

KONSTANTINOV, O.Ya., inzh.

Conditions of fine flat-surface grinding of parts with the wheel  
periphery. Trudy LII no.3:47-57 '60. (MIRA 13:10)  
(Grinding and polishing)

*CONSTANTINOV, G.YA.*

PHASE I BOOK EXPLOITATION

SOV/4501

Leningrad. Inzhenerno-ekonomicheskii institut

Chistovaya obrabotka i sostoyaniye obrabotannoy poverkhnosti (Finishing Operations and Surface Roughness) [Leningrad] Izd-vo Leningr. univ-ta, 1960. 268 p.  
(Series: Its: Trudy, vyp. 30) 1,825 copies printed.

Ed. (Title page): A.A. Matalin, Professor; Ed. (Inside book): G.M. Aron; Tech. Ed.: S.D. Vodolagina.

PURPOSE: This collection of articles is intended for technical personnel in the machine-building industry and for students in schools of higher technical education.

COVERAGE: The collection contains articles on the problems of developing methods for mechanical machining (such as grinding and superfinishing with strain hardening, roll burnishing, fine grinding, etc.) which would serve to increase the life of machine parts exposed to friction and wear, and thereby insure high productivity and economy. Methods for determining residual stresses (only in macrostresses and microstresses) are discussed in detail. Also considered are the possibility

Card 1/4

Card 2/4

Finishing Operations and Surface Roughness

SOV/4501

X Konstantinov, O. Ya. Regimes of Precision Grinding of Parts With the Wheel Face 47

Glikman, I.A., Doctor of Technical Sciences, Professor. Method of Determining Residual Stresses 58

PART. II. MODERN METHODS OF THE AUTOMATION OF MECHANICAL MACHINING  
IN  
LOT PRODUCTION 99

Mlyumberg, V.A. Candidate of Technical Sciences, Docent. Problems of Labor Productivity and Efficiency in the Application of Hydraulic Slide Rests on Lathes 99

Matrosov, G.A., Engineer. Accuracy of Machining on Lathes With a Hydraulic Slide Rest 125

Sukhoparov, A.A., Engineer. Experience Gained in Preparation for Manufacture of Parts by Group Machining Methods at the "Ekonsmayzer" Plant 137

Card 3/4

Finishing Operations and Surface Roughness

SOV/4501

Pakidov, P.A., Candidate of Technical Sciences, Docent. Analysis of Performance of a Single-Coordinate System of Program Control of a Lathe [with limit switches] 164

Pakidov, P.A. Capacitance Transducers of New Construction and Their Application 181

PART III. ADVANCED MANUFACTURING METHODS  
IN  
PLANTS OF THE GERMAN DEMOCRATIC REPUBLIC 190

Matalin, A.A. Preparation for Production and Some Problems of Planning and Organization of Production in Plants of the German Democratic Republic 190

Matalin, A.A. Advanced Production Methods in the Industry of the German Democratic Republic 216

AVAILABLE: Library of Congress

Card 4/4

VK/wrc/gmp  
11-16-60

KONSTANTINOV, O. Ya. Cand Tech Sci -- "Study of the process of ~~flat-polishing~~ *surface grinding*  
*for* *2* *as of* ~~or~~ high class *as of* purity and precision." Len, 1961 (Min of Higher and Secondary  
Specialized Education RSFSR. Len Inst of Precision Mechanics and Optics).  
(KL, 4-61, 197)

-142-

S/514/61/000/005/012/014  
1001/1207

Author: Konstantinov, O.Ya.

TITLE: Surface grinding of components requiring a high degree of surface finish and accuracy

SOURCE: Akademiya nauk. Komissiya po tekhnologii mashinostroyeniya. Semina po kachestvu poverkhnosti. Trudy. no.5. 1961. Kachestvo poverkhnosti detalей машин; metody i pribory, uprochaniye metallov, tekhnologiya mashinostroyeniya, 321-326

TEXT: In order to study the processes of peripheral grinding carried out by horizontal surface-grinders, in view of the increasing requirements for accuracy and surface quality, the department for "Machine-building Technology" of the ЛЭНЕМ (LEIEM) carried out a series of investigations the results of which are amply reported. Tests were conducted on a re-designed and improved surface-grinder of the 271EM type produced by the Vitebsk plant. The conditions of truing and dressing the abrasive wheel were studied, the grinding conditions for the obtaining of high surface finish were analyzed, and the accuracy of surface-finish grinding were investigated. As was found, truing conditions for the grinding wheel are essential in obtaining

Card 1/2



KONSTANTINOV, O.Ya.

Grinding of surfaces by high classes of smoothness and precision.  
Trudy Sem.po kach.poverkh, no.5:321-326 '61. (MIRA 15:10)  
(Grinding and polishing)

KONSTANTINOV, O.Ya., kand. tekhn. nauk

Magnetic plate with permanent ceramic magnets. Mashinostroitel'  
no.9:26-27 S '63. (MIRA 16:10)

(Magnets)

KONSTANTINOV, Oleg Yakovlevich; SEMENENKO, P.A., red.

[Magnetic and electromagnetic machine-tool attachments]  
Magnitnye i elektromagnitnye stanochnye prispособleniia.  
Leningrad, 1964. 32 p. (MIRA 17:9)

KONSTANTINOV, O.Ye., kand. tekhn. nauk

Thermal deformations and rigidity of electromagnetic attachments.  
Mashinostroitel' no.2:25-29 F '65. (MIRA 18:3)

ELYUMBERG, V.A., kand. tekhn. nauk; KONSTANTINOV, O.Ya.

Ways for improving machine-tool attachments. Mashinostroitel' no.6;  
22-25 Je '65. (MIRA 18:7)

KONSTANTINOV, P.

Single-duct ventilating installations are needed. Muk.-elev.prom.  
24 no.2:30 P '58. (MIRA 11:4)

1. Zamestitel' nachal'nika Molodezhnenskogo oblastnogo upravleniya  
khleboproduktor.  
(Ventilation) (Grain--Storage)

KONSTANTINOV, P.

BULGARIA / Diseases in Animals. Diseases Caused by  
Protozoa

R

Abs Jour: Ref Zhur-Biologiya, No 16, 1958, 74235

Author : Konstantinov, Petor; Denev, Iordan

Inst : Not given

Title : Investigations on the Use of Penicillin During  
Coccidiosis in Young Chicks

Orig Pub: Zhivotnovodstvo i vet. delo, 1957, 11, No 3, 24-28

Abstract: Experiments were conducted on three farms. For six days, 2000 units of penicillin (I) dissolved in distilled water was given daily with food. All of the young chicks that received I recovered and in comparison with the controls gained significantly in weight. Treatment of 3,210 young chicks in field

Card 1/2

BULGARIA / Diseases in Animals. Diseases Caused by  
Protozoa

R

Abs Jour: Ref Zhur-Biologiya, No 16, 1958, 74235

conditions lead to cessation of the disease. An experiment in the prophylactic administration of I was conducted on three farms with 4,500 young chicks. At one farm, 600 units of I was given to the young chicks daily from the moment of hatching; in another--every day for 20 days, beginning when they were 10 days old; in the third--from the moment they hatched for 40 days with a five day interval. At the first two farms, the disease did not appear clinically and the young chicks developed well, although separate oocysts were sometimes detected in their stool; in the third--there were cases of murrain in the young chicks. --L. P. Menshikov

Card 2/2



BULGARIA/Diseases of Farm Animals - Diseases Caused by Protozoa

R

Abs Jour : Ref Zhur Biol., No 5, 1959, 21431

Author : Pishev, D., Konstantinov, P., Katerinov, Y.

Inst : -

Title : Studies on Trichomoniasis of Cattle in Bulgaria

Orig Pub : Selskostop. mia"1, 1958, 3, No 1, 49-56

Abstract : As a result of investigation of 4195 cows at trichomoniasis infested farms and of 102 artificially infected cows, the correlation of trichomoniasis on the one hand and sterility and abortions on the other was demonstrated. Twenty to 65 percent of cows affected with trichomoniasis were sterile, 0.3-40 percent (3.8 percent on the average) of cows aborted. Most abortions occurred on farms where the disease had appeared a short time previously. In all of the aborted cows and in 11-100 percent (64 percent on the average) of the sterile cows inflammatory processes were found in the sex apparatus; trichomonades, however,

Card 1/2

1. KONSTANTINOV, P.
2. USSR (600)
4. Ice Cream Freezers
7. Method of cleaning up brine in the "Eskimo" generator. Khok. tekhn. 29 no. 3, 1952

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000824410013-8

✓ Sulfonation of *tert*-butyl derivatives of 2,4,6-trimethylphenol. L. Gol'dfarb, L. V. Antokh and P. A. Kuznetsov. Zh. Obshch. Khim. 24:1034, 1950. *Inorg. Akad. Nauk SSSR Ser. Khim.* 1950, 1034. 24-6.—Sulfonation of *tert*-butylphenol. The age of Me<sub>3</sub>C group from the 2-position, while the SO<sub>3</sub>H group enters at the 4-position, although 4-position is not excluded. *tert*-butylphenol (I) and a 7 g. portion of 14 hrs. followed by treating with 10 ml. of a pyridine-soln. of NaOH. The addn. of concd. soln. of 4 g. of NaOH (2.37 g. Na 1,5-di-*tert*-butylphenol, 1.5 g. H<sub>2</sub>O). The same product formed. 1 g. in 80 ml (CH<sub>2</sub>Cl<sub>2</sub>) was treated with SO<sub>3</sub> in (CH<sub>2</sub>Cl<sub>2</sub>) over 20 min. and was a Na salt monohydrate does not lose H<sub>2</sub>O. does so as 140°. The m.p. 193-4° (from H<sub>2</sub>O). IR (KBr) 3.0-3.5 μ. CH<sub>2</sub>Cl<sub>2</sub> 0.5 ml. on a test tube. 2,5-di-*tert*-butylphenol, 1.5 g. in 80 ml. heptane. IR (KBr) 3.0-3.5 μ. steam at 140° in 10 min. 1.5 g. in 80 ml. heptane. IR (KBr) 3.0-3.5 μ.

Synthesis of alcohols of aliphatic series from thiophene

[illegible]



KONSTANTINOV, P. A. Cand Chem Sci -- (diss) "Effect of basic nickel upon  
aldehydes, ketones, ethers, and acetals of the thiophene series." Mos, 1957.  
(Acad Sci USSR. Inst of Organic Chemistry im N. D. Zelinskiy), 120 copies  
(KL, 6-58, 99)

KONSTANTINOV, P. A.

AUTHORS:

Gol'dfarb, Ya. L., and Konstantinov, P. A.

62-1-15/21

TITLE:

The Structure of Products Obtained from the Acylation and Formylation of 2-Methyl-5-Tertiary Butyl Thiophene and 2,5-Di-Tri-butyl Thiophene (O stroyenii produktov atsilirovaniya i formilirovaniya 2-metil-5-tret.butiltiofena i 2,5-di-tret.butiltiofena).

PERIODICAL:

Izvestiya Akademii Nauk SSSR, Otdeleniye Khimicheskikh Nauk, 1957, No. 1, pp. 112-117 (U.S.S.R.)

ABSTRACT:

Experiments showed that formylation, acetylation and also bromination of 2-methyl-5-tertiary butyl thiophene force the new substitute into position 3. During the acetylation of 2,5-di-tri-butyl thiophene in the presence of stannicchloride, the migration of the tertiary butyl group has not been observed. The possibility of obtaining thiophenecarboxylic acids, substituted in alpha position with alkyl radicals (methyl, tertiary butyl) by simultaneous reaction of iodine

Card 1/2

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000824410013-8

The Structure of Products Obtained from the Acylation and Formylation of 2-Methyl-5-Tertiary Butyl Thiophene and 2,5-Di-Tri-butyl Thiophene and pyridine and consequent cleavage (with alkali) of the pyridine salt, is explained. The products obtained are listed as: 2-methyl-5-tert.butyl -3-thiophenecarboxylic acid, 2,5-di-tri-butyl-3-thiophenecarboxylic acid and 2-methyl-5-tert. butyl-3-bromothiophene.

There are 14 references, of which 3 are Slavic.

ASSOCIATION:

Academy of Sciences of the USSR, Institute of Organic Chemistry imeni N. D. Zelinskiy

PRESENTED BY:

SUBMITTED

February 9, 1956

AVAILABLE:

Library of Congress

Card 2/2

KONSTANTINOV, P. A.

5(3)

AUTHORS:

Gol'dfarb, Ya. L., Konstantinov, P. A.

SOV/62-59-1-20/38

TITLE:

On the Effect of Raney Nickel on Ketones and Acetals of the Thiophene Series (O deystvii nikelya Reneya na ketony i atsetali ryada tiofena)

PERIODICAL:

Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1959, Nr 1, pp 121 - 129 (USSR)

ABSTRACT:

In the present paper the authors investigated the influence exercised by the structure of some carbonyl-containing compounds of the thiophene series as well as conditions for the reduction of the carbonyl group during hydrogenolysis in the presence of Raney Nickel as a catalyst. The authors tried to explain the possibility of using the factors mentioned for the maintenance of this function in hydrogenolysis. Observation of hydrogenolysis of 2-n-butyl thienone (I) under various conditions have shown that: 1) temperature decrease during treatment with skeleton nickel within a range of 80 to -10° favors a higher yield of octanone-4 (II) and accordingly decreases the yield of octanol-4 (III); 2) Prolongation of hydrogenolysis from 1 to 14 hours did not

~~Card 1/3~~

*Incl. Orig. Chem. in N.D. 2-1-59, A-1 USSR*

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000824410013-8

On the Effect of Raney Nickel on Ketones and Acetals of the Thiophene Series

SOV/62-59-1-20/38

change considerably the yield of the product; 3) Addition of acetic acid to the primary mixture for neutralizing the alkali collected by nickel also does not change considerably the ratio octanone:octanol. The n-butyl-tertiary butylketone is formed during the reducing desulfurization of tert-butyl-2-thienyl ketone by Raney nickel synthesized according to Adkins and Billica. Under similar conditions, a mixture of aliphatic ketone and secondary alcohol is produced by ketones of the n-butyl thienone type. In view of the fact that Raney nickel is capable of splitting the bonds between carbon atoms and others it was difficult to predict its effect on acetals. It was stated that ethylene acetals of aliphatic aldehydes are synthesized by hydrogenolysis of acetals. This may serve as a preparative method in such cases where the synthesis of the latter by other methods is complicated. There are 18 references, 4 of which are Soviet.

~~Card 2/3~~

KONSTANTINOV, P. A.

5.3610

AUTHORS: Santalova, N. I. (Deceased), Konstantinov, S.<sup>80007</sup>  
P. A., Gol'dfarb, Ya. L. S/020/60/131/05/033/069  
B011/B117

TITLE: Reducing Desulfurization of Some Diamines of the Thiophene Series

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol 131, Nr 5, pp 1102-1105 (USSR)

TEXT: The authors wished to extend the reducing desulfurization method to the di-tertiary amines of the thiophene series. Thus, higher alkylene diamines can be obtained, which, in turn, could be utilized to synthesize the bis-ammonium salts with a potential curare-like effect. As compared to decamethonium, the halogen alkylates of the diamines IV and IVa would form a new type of such compounds. They are ramified in the center of the chain. Such ramifications exert an influence on the activity of some substances with a curare-like effect (Ref 4). The authors used 2,2-bis(2-thienyl)-butane which is easily formed from thiophene and methyl ethyl ketone as the starting material. By chloromethylation, the bis-chloro-methyl derivative (I) was obtained. This derivative was used in the "raw" state, since it decomposes to a considerable degree when subjected to vacuum distillation. When hexamethylene tetramine is reacted with I, the corresponding salt, and from this, the diamine II is obtained in the ordinary way. Hydrogenolysis with Raney nickel yielded only mixtures distillable in a too broad range. Therefore, skeleton cobalt was used by the authors, although it is

Card 1/2



L 10666-63

EPR/EPF(j)/EPF(c)/EWI(m)/BDS--ASD--Pr-l/Pc-l/Ps-l--RM/WK 71  
S/079/63/033/004/005/010 69

AUTHOR: Konstantinov, P.A., Shupik, R.I.

TITLE: Action of Reney nickel on silicoorganic derivatives of thiophene

PERIODICAL: Zhurnal obshchey khimii, v. 33, no. 4, 1963, 1251-1255

TEXT: The action of halogenoalkylsilanes on lithium derivatives of thiophene and its homologs produces silicoorganic derivatives of thiophene: 2-methyl-5-trimethylsilylthiophene, 2,5-ditrimethylsilylthiophene, dimethyldi-(2 thienyl)silane, diethyldi-(2-thienyl)silane, 5-trimethylsilyl-2-thiophene aldehyde and  $\beta$ -(5-trimethylsilyl-2-thienyl)ethanol. Upon the action of Reney nickel on silicoorganic derivatives of thiophene the C-S bond is broken and the corresponding derivatives of the

Card 1/2

L 10666-63

S/079/63/033/004/005/010 2

Action of Reney nickel on...

aliphatic series are formed. The introduction of atoms of silicon into the  $\alpha$ -position of the thiophene ring increases the stability of the ring with respect to Reney nickel. Silico-organic compounds of the aliphatic series were obtained: trimethylpentylsilane, 1,4-bis(trimethylsilyl)butane, dimethyldibutylsilane, and 5-trimethylsilylpentanol-1. There is 1 table of characteristics of the alkyl thienylsilanes. 7

ASSOCIATION: Moskovskiy fiziko-technicheskiy institut  
(Moscow Physics-Engineering Institute)

SUBMITTED: May 18, 1962

kes *Bur*  
Card 2/2

ZHUKOV-VEREZHNIKOV, N.N.; VOLKOV, M.N.; RYBAKOV, N.I.; SAKSONOV, P.P.;  
KOZLOV, V.A.; KONSTANTINOV, P.A.; ANTIPOV, V.V.; LOBROV, N.N.;  
ANISKIN, Ye.D.

New ways of studying chemical protection against genetic changes.  
Probl. kosm. biol. 4:445-450 '65.  
(MIRA 18:9)

L 11657-66 EWT(d)/FSS-2

ACC NR: AP6000790

SOURCE CODE: UR/0106/65/000/009/0043/0049

AUTHOR: Konstantinov, P. A.

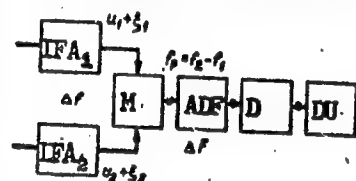
ORG: none

TITLE: Two-channel communication system with stable difference frequency and amplitude keying

SOURCE: Elektrosvyaz', no. 9, 1965, 43-49

TOPIC TAGS: signal noise separation, radio communication system

ABSTRACT: This system of radio communication is considered: a signal sent by a two-frequency transmitter (on both frequencies) is received by two receivers whose



IF amplifiers (see figure) combine their outputs in a multiplier M (mixer); next, amplifier-and-difference-frequency-filter ADF isolates the difference frequency and sends it to detector D and decision unit DU. If the difference-frequency stability is much higher than that of transmitter frequencies, the ADF passband can be made

Card 1/2

UDC: 621.396.629

L 11657-66

ACC NR: AP6000790

much narrower than those of IFA's; this results in lower output noise. Components of IFA signal and noise are analyzed, their dispersions are determined, and the final output dispersions with and without signal are found. A true power gain obtainable with the above two-channel system, as compared to the conventional single-channel system, is given as:  $Q \approx 0.5 \Delta f / \Delta F$ , where  $\Delta f$  and  $\Delta F$  are the IFA and ADF passbands, respectively. Orig. art. has: 3 figures and 44 formulas.

SUB CODE: 17 / SUBM DATE: 19Apr64 / ORIG REF: 002 / OTH REF: 001

Card 2/2

L 14295-66 EWT(m)/EPF(n)-2 GG/RD

ACC NR: AT6003878

SOURCE CODE: UR/2865/65/004/000/0445/0450

AUTHOR: Zhukov-Verezhnikov, N. N.; Volkov, M. N.; Rybakov, N. I.; Saksonov, P. P.;  
Kozlov, V. A.; Konstantinov, P. A.; Antipov, V. V.; Dobrov, N. N.; Aniskin, Ye. D.

ORG: none

TITLE: New ways of studying chemical protection against genetic changes 19.44, 55 32  
B41

SOURCE: AN SSSR. Otdeleniye biologicheskikh nauk. Problemy kosmicheskoy biologii, v. 4, 1965, 445-450

TOPIC TAGS: bacteria, x ray irradiation, bacterial genetics, chemical agent

ABSTRACT: Aminoethiols and some pyrimidine analogs were tested for their ability to block development of infectious phage from prophage after induction of E. coli K-12 ( $\lambda$ ) with x-rays. Doses with a previously established non-toxic effect (0.05% concentration) were used. The desired chemical preparation was added to a bacterial culture diluted in a physiological medium. Experimental and control samples were subjected to x-ray irradiation (dose, 15,000 r) and then cultured on agar. The number of induced phage particles in irradiated samples with and without each preparation was then compared. 2-Mercaptopropylamine hydrochloride was

Card 1/2

L 14295-66

ACC NR: AT6003878

most effective; cultures treated with it produced 119 times fewer phage particles than control samples. Other good inhibitors of induced phage formation were 2-(gamma-aminopropyl) disulfide dihydrobromide, sodium diethyldithiocarbamate and ammonium dithiocarbamate, which reduced phage production 76.3—70.1 times. Less effective were the salts of  $\beta$ -mercaptoethylamine tested: 2-mercaptoethylamine hydrobromide, 2-mercaptoethylamine disulfide hydrochloride, 2-mercaptoethylamine hydroiodide, and 2-mercaptoethylamine hydrochloride.

The experimental data show the essential connection between the chemical structure of the tested preparations and their ability to block the development of infectious phage. The antigenetic effect of  $\beta$ -mercaptoethylamine preparations is determined by their acid radicals as well as by their base. It may be possible to obtain even more effective preparations of this compound by forming salts with other acids. The failure of 3- $\beta$ -aminoethylisothiuronium hydrobromide to produce an antigenetic effect is especially interesting because in previous experiments this compound decreased the death rate of animals subjected to a lethal radiation

dose by 70-100%. Orig. art. has: 1 table. [ATD PRESS: 4091-F]  
SUB CODE: 06 / SUBM DATE: none / ORIG REF: 013 / OTH REF: 003

Card 2/2

L 14294-66

.ACC NR: AT6003881

tained in the second generation. However, preparation P-46 completely removed the injurious radiation effect in that generation. Experimental data indicate the possibility of partially or completely removing the depressing effect of  $\beta$ -radiation on plants with the help of physiologically active compounds. Orig. art. has: 4 tables. [ATD PRESS: 4091-F]

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 004 / OTH REF: 005

CC  
Card 3/3



KONSTANTINOV, P.A.

Two-channel communication system with stable difference frequency  
and amplitude keying. Elektrosviaz' 19 no.9:43-49 S '65.  
(MIRA 18:9)

31198

S/106/61/000/012/002/010

A055/A127

6.4.00  
AUTHOR: Konstantinov, P. A.

TITLE: On the expediency of using multifrequency communication systems

PERIODICAL: Elektrosvyaz', no. 12, 1961, 13 - 18

TEXT: The author examines the noise immunity of multifrequency communication systems with automatic reception. The number of possible combinations with a binary code and with an m-base code is:

$$N_2 = 2^{n_2} \quad (1)$$

and

$$N_m = m^{n_m} \quad (2)$$

respectively. Expressing by  $P_m$  and  $P_2$ , respectively, the probability of the elementary signal distortion, the probability of correct reception of all the  $n_m$  elementary signals composing a code combination, i. e. the probability of correct reception of the order, will be:

$$Q_{km} = (1 - P_m)^{n_m} \quad (4)$$

Card 1/5

On the expediency of using multifrequency...

31198  
3/106/61/000/012/002/010  
A055/A127

and the probability of the distortion of the order (assuming that  $P_m \ll 1$ ) will be:

$$P_{km} = n_m P_m, \quad (5)$$

if for  $m = 2$ :

$$P_{k2} = n_2 P_2. \quad (6)$$

The relative probability of distortion is

$$\frac{P_{km}}{P_{k2}} = \frac{1}{\log_2 m} \frac{P_m}{P_2}. \quad (7)$$

The author determines the relative probability of distortion in the case of multifrequency communication systems where code combinations are composed of successive sendings (oscillations of one of the  $m$  frequencies can correspond to each of these sendings). It is assumed that the receiver contains frequency discriminators preceded by filters and followed by comparing devices. Introducing the expressions  $\alpha_m = A/\delta_m$  and  $\alpha_2 = A/\delta_2$  for the signal-to-interference ratio, the author finds, for the case analyzed by L. M. Fink [Abstracter's note: No explanation given]:

1) for a low frequency stability ( $\alpha_m = \alpha_2$ ):

Card 2/5

31198

S/106/61/000/012/002/010

A055/A127

On the expediency of using multifrequency...

$$\frac{P_{km}}{P_{k2}} = \frac{2(m-1)!}{\log_2 m} \sum_{i=1}^{m-1} \frac{(-1)^{i+1}}{(i+1)!(m-i-1)!} \exp \left[ \frac{\alpha_2^2 (1-i)}{4(i+1)} \right]. \quad (14)$$

2) for a high frequency stability ( $\alpha_m = \alpha_2 \sqrt{\log_2 m}$ ):

$$\frac{P_{km}}{P_{k2}} = \frac{2(m-1)!}{\log_2 m} \sum_{i=1}^{m-1} \frac{(-1)^{i+1}}{(i+1)!(m-i-1)!} \exp \left[ \frac{\alpha_2^2 [1+i(1-2\log_2 m)]}{4(i+1)} \right]. \quad (15)$$

These formulae correspond, however, to two extreme cases, i.e. when the receiver pass-band is determined entirely either by the frequency instability ( $\alpha_m = \alpha_2 = \text{const.}$ ) or by the duration of the elementary signal ( $\alpha_m = \alpha_2 \sqrt{\log_2 m}$ ). It is interesting to examine also the intermediate case and to find the dependence of the relative probability of distortion on the frequency stability. Expressing by  $\tau_m$  and  $\tau_2$  the duration of elementary signals and assuming that an increase of  $m$  brings about an increase of the signal duration according to the relationship:

$$\tau_m = \tau_2 \log_2 m, \quad (8)$$

whereas the pass-band of the separation filters is narrowed  $q$  times, the author

Card 3/5

31198  
S/106/61/000/012/002/010  
A055/A127

On the expediency of using multifrequency...

finds:

$$\frac{P_{km}}{P_{k2}} = \frac{m-1}{\log_2 m} \exp \left[ \frac{\alpha_2^2}{4} (1-q) \right]. \quad (19)$$

In order to estimate the influence of the frequency instability on the probability of distortion, he assumes that the filter band is:

$$\Delta f_{filt.} = \Delta f_{\tau} + \Delta f_{instab.}$$

Introducing  $\Delta f_{instab.}$  or rather, the expression:

$$b = \Delta f_{instab} \tau_2$$

into formula (19), he finally obtains:

$$\frac{P_{km}}{P_{k2}} = \frac{m-1}{\log_2 m} \exp \left[ \frac{\alpha_2^2 (1 - \log_2 m)}{4(1 + b \log_2 m)} \right]. \quad (21)$$

This formula permits him to investigate the dependence of the probability of dis-

Card 4/5

29586

S/108/61/016/011/002/007  
D201/D304

6.9800  
6.4800

AUTHOR: Konstantinov, P.A., Member of the Society

TITLE: The interference-killing features of a communication system with tone manipulation at an ideal reception

PERIODICAL: Radiotekhnika, v. 16, no. 11, 1961, 18 - 25

EXT: An analysis is given of the interference-killing features of various communication systems with tone manipulation when two signals having different amplitudes are fully detectable. An ideal receiver is stated to be one receiving the minimum probability of signal distortion. For two values of signal  $S_1(t)$  and  $S_2(t)$  and equal energies, the ideal receiver detects  $S_1$  when the ratio of probability functions satisfies condition

$$\frac{L(S_1)}{L(S_2)} = e^{\frac{1}{N_0} \int_0^T x(t)[S_1(t) - S_2(t)] dt} > 1 \quad (1)$$

Card 1/5

29586

S/108/61/016/011/002/007  
D201/D304

The interference-killing features ...

is the correlation and  $E_0$  is the signal energy and  $\Phi(x)$  the probability integral. 1) Communication system FM-AM. This consists of frequency manipulation of the sub-carrier and of amplitude modulation of the carrier. For this case

$$R_s = \frac{1}{1 + \frac{m}{2}}, \quad (8)$$

which for  $m = 1$  becomes  $R_s = 2/3$  and Eq. (3) becomes

$$P = 0.5 - \Phi\left(\sqrt{\frac{E_0}{6N_0}}\right). \quad (9)$$

For FM only this equation is

$$P = 0.5 - \Phi\left(\sqrt{\frac{E}{2N_0}}\right). \quad (10)$$

Comparing the two, shows that the power gain of FM-AM is 3 times greater. 2) PM-AM system. From it  $P$  is derived as

Card 3/5

The interference-killing features ...

29586  
S/108/61/016/011/002/007  
D201/D304

$$P = 0.5 - \Phi\left(\sqrt{\frac{E_0}{3N_0}}\right) \quad (13)$$

which shows an improvement on FM-AM system. 3) FM-FM system.  $R_s$  for this system is derived as

$$R_s = J_0^2(\beta) \quad (20) \quad \checkmark$$

where  $\beta$  is the modulation index. For large  $\beta$ , therefore, the probability of signal distortion will be determined by Eq. (10) as for the pure FM system. 4) PM-FM system. For this  $R_s$  is derived as

$$R_s = J_0(2\beta). \quad (23)$$

For a given modulation index, and using (23) and (3), the probability of signal distortion may be determined. It will be smallest for  $\beta$  corresponding to the negative values of the Bessel function  $J_0(2\beta)$ . Condition (2) permits the design of the ideal receiver for the above systems. It consists of two heterodynes, coherent with the signals, two multipliers and two integrators. The integrate

Card 4/5



The interference-killing features ...

29586  
S/108/61/016/011/002/007  
D201/D304

effects of both channels are read out and depending on the sign of the difference obtained, a threshold arrangement records the positive or negative signal. There are 1 figure and 3 Soviet-bloc references.

ASSOCIATION: Nauchno-tekhnicheskoye obshchestvo radiotekhniki i elektrosvyazi im. A.S. Popova (Scientific and Technical Society of Radio Engineering and Electrical Communication im. A.S. Popov) [Abstractor's note: Name of Association taken from 1st page of journal].

SUBMITTED: November 3, 1960

X

Card 5/5

L 65149-65 EWT(1)/EEC(k)-2/T/EWA(h) IJP(c)  
ACCESSION NR: AP5021571

AUTHOR: Konstantinov, P. B. 47

TR/0296/65/000/013/0044/0044  
621.382.232

TITLE: Tunnel diode. Class 21, No. 172434  
25.47

24  
B

SOURCE: 'Byulleten' izobreteniy i tovarnykh znakov, no. 13, 1965, 44

TECH TAGS: tunnel diode

ABSTRACT: This Author Certificate introduces a tunnel diode, e.g., on a germanium base, enclosed in a ceramic shell to which are fused the upper and lower contact leads of the device (with a cap soldered to the upper lead). To increase the frequency limit, to decrease the inductance of the base, and to simplify the production technology, the upper lead of the device is in the form of a ring with a diameter of 0.5 mm at an angle, e.g., 90° (see Fig. 1 of the enclosure). A crystal of variable profile is created between the side face of the crystal and the lug of the upper lead. The electrode material, forming a p-n junction at the side face of the crystal, is at the same time a contact with the lug of the upper lead of the device. Orig. art. has: 1 figure.

[04]

ABSTRACT: none  
Card 1/8

L 65149-65

ACCESSION NP: AP5021571

SUBMITTED: 25Mar63

NO REF SCV: 000

ENCL: 01

OTHER: 000

0  
SUB CODE: EC

ATD PRESS: 4083

Card 2/3

L 65149-65

ACCESSION NR: AP5021571

ENCLOSURE? 01

0

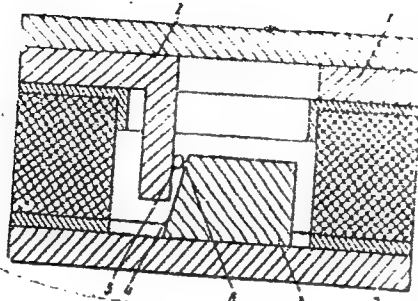


Fig. 1. Tunnel diode

1- Upper lead; 2- lug of upper lead; 3- crystal of semi-conducting material; 4- side face of crystal; 5- electrode material; 6- p-n junction.

Card 3 <sup>gk</sup>/<sub>2</sub>

USSR/Cultivated Plants. Fruits. Berries.

M

Abs Jour : Ref Zhur-Biol., No 15, 1958, 68361

Author : Konstantinov, P. K., Ol'khovskiy, M. K.

Inst : -

Title : The Best Strawberry Strains in Polesia and  
in the Ukrainian Wooded Steppe Zones.

Orig Pub : Sad i ogorod, 1957, No 2, 50-52

Abstract : The Culver strawberry strain occupies first place in terms of yields, fruit size, and taste qualities. The Koralka strain occupies second place, and constitutes the most valuable preserving kind. In Lugansk, Zhitomir, and Surny Oblast's, the Mysovka strain is outstanding in terms of yields. Kiev Early No 2 is the earliest-ripening strain. It ripens 7-8 days earlier than the Roshchinskaya strain. In 1955,

Card : 1/2

KONSTANTINOV, P. N.

Prof.

No.1, 1948 "One More Article Concerning the Organisation of Testing Work," Sov. Agron.,

Active Member, All-Union Acad. Agr. Sci. in. Lenin

KONSTANTINOV, PETR NIKIFOROVICH

Agriculture

Principles of experimental work in agriculture, Moskva, Gos. izd-vo sel'khoz. lit-ry, 1952

Monthly List of Russian Accessions, Library of Congress, October 1952. UNCLASSIFIED.

1. KONSTANTINOV, P. N.
2. USSR (600)
4. Irrigation
7. Problems of watering and irrigation during the growing season. Gidr. i mel. 5  
no. 2, 1953

9. Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.



KONSTANTINOV, P. N.

6791. Konstantinov, P. N. Maslichnyye kul'tury v penzenskoy oblasti. Penza, Kn. izd., 1954. 80 s. s. ill. 20 sm. 3.000 ekz. 1 R. 5 K. - (55-2947) P 633.85 (47.398)

SO: Knizhnaya Letopis' No. 6, 1955

KONSTANTINOV, R.

Preliminary Pressed and Churned Oils (Edible Salad Oils). Leka  
Promishlenost (Light Industry), #12:21:Dec. 1954

**KONSTANTINOV, R.M.**

Greisen type of stannic mineralization in exocontact granites  
and veins of eastern Transbaikalia. Trudy MGRI no.28:47-50 '55.  
(Transbaikalia--Petrology) (MLRA 8:6)

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 5,  
p 58 (USSR) 15-57-5-6112

AUTHORS: Aristov, V. V., Stankeyev, Ye. A., Konstantinov,  
R. M.

TITLE: The Origin of Amazonite Granites in the Eastern  
Trans-Baikal Region (K voprosu o proiskhozhdenii  
amazonitovykh granitov v Vostochnom Zabaykal'ye)

PERIODICAL: Tr. Mosk. geol-razved. in-ta, Vol 29, pp 52-56, 1956

ABSTRACT: Several small masses of amazonite granites are  
known in the eastern trans-Baikal region. They are  
associated with specific rare-metal mineralization.  
A mass, forming a steeply dipping dike-like body  
(400 to 500) was studied. The amazonite granites  
consist of microcline-amazonite (30 percent, oc-  
curring in grains of irregular outlines, and  
replaced by quartz), quartz (30 percent), albite

Card 1/3

The Origin of Amazonite Granites (Cont.)

15-57-5-6112

and other minerals that contain rare and disseminated elements  
lead the authors to suggest that the amazon granites were formed  
by crystallization of a magma approximately the composition of  
pegmatite and derived from the differentiation of common biotite-  
granite magma. Rapid crystallization of the magma at low temper-  
atures and pressures was responsible for the absence of secondary  
differentiation and for the elimination of the volatile con-  
stituents. These latter gave rise to greisenization of the host  
sand-silt rocks up to the final consolidation of the mass.

Card 3/3

O. V. B.

KONSTANTINOV, R.M.

Two types of cassiterite found in quartzitic feldspar veins  
in the Etykinskoye deposits of eastern Transbaikalia. Zap.  
Vses.min.ob-va 85 no.4:583-585 '56. (MLRA 10:2)

(Transbaikalia--Cassiterite)

KHETCHIKOV, L.N.; KONSTANTINOV, R.M.

Distribution of zinc, lead, and copper in enclosing rocks of tin  
deposits in the Far East. Geol. rud. mestorozh. no.4:127-133  
Jl-Ag '59. (MIRA 13:1)

1. Dal'nevostochnyy filial Sibirskogo otdeleniya AN SSSR, Vladivostok  
i Institut geologii rudnykh mestorozhdeniy, petrografii, mineralogii  
i geokhimii AN SSSR, Moskva.  
(Soviet Far East--Ore deposits)

KONSTANTINOV, R.M.

Some problems in studying the dynamics of hydrothermal solutions.  
Soob.DVFAK SSSR no.10:250-254 '59, (MIRA 13:11)

1. Dal'nevostochnyy politekhnicheskiy institut imeni V.V.Kuybysheva.  
(Water, Underground)

KONSTANTINOV, R.M.; AKIMOVA, G.M.; KHETCHIKOV, L.N.; KOROSTELEV, P.G.

Zinc content of rocks from the Tetyukhe skarn-complex ore deposits.  
Soob. DVFAN SSSR no.10:262-264 '59. (MIRA 13:11)

1. Dal'nevostochnyy politekhnicheskiy institut im.V.V.Kuybysheva  
i Dal'nevostochnyy filial Sibirskogo otdeleniya AN SSSR.  
(Zinc--Analysis) (Tetyukhe Valley—Ore deposits)



KONSTANTINOV, R.M.; KHETCHIKOV, L.N.; SHAKUNOV, V.N.

Organizing geochemical prospecting for complex ore deposits in the Maritime Territory. Soob.DVFAH SSSR no.12:3-8 '60. (MIRA 13:11)

1. Dal'nevostochnyy filial imeni V.L.Komarova Sibirskogo otdeleniya AN SSSR i Institut geologii rudnykh mestorozhdenii, petrografii, mineralologii i geokhimii AN SSSR.

(Maritime Territory—Geochemical prospecting)

TOMSON, I.N.; KONSTANTINOV, R.M.

Relationship between ore formations as revealed by certain regions  
in the Pacific ore belt. Geol.rud.mestorozh. no.4:61-70 J1-Ag  
'61. (MIRA 14:10)

1. Institut geologii rudnykh mestorozhdenii, petrografii,  
mineralologii i geokhimii AN SSSR.  
(Far East--Ore deposits)

KHETCHIKOV, L.N.; KONSTANTINOV, R.M.

Importance of the dispersion of primary halos of zink in prospecting for skarn-complex metal and tin-complex metal deposits in the Far East. Biul.nauch.-tekhn.inform.VIMS no.1:3-5 '60. (MIRA 15:5)

1. Dal'nadvostochnyy filial AN SSSR.  
(Far East—Ore deposits)

BETEKHTIN, A.G.; VOL'FSON, F.I.; GENKIN, A.D.; DUBROVSKIY, V.N.; YEROFEYEV,  
B.N.; KONSTANTINOV, R.M.; MATERIKOV, M.P.; SOKOLOV, G.A.; STRAKHOV,  
N.M.; TATARINOV, P.M.; TOMSON, I.N.; SHADLUN, T.N.; SHATALOV, Ye.T.;  
SHIPULIN, F.K.

Oleg Dmitrievich Levitskii; obituary. Geol. rud. mestorozh. no.2:  
3-6 Mr-Ap '61. (MIRA 12:5)  
(Levitskii, Oleg Dmitrievich, 1909-1961)

LEVITSKIY, O.D. [deceased]; ARISTOV, V.V.; KONSTANTINOV, R.M.; STANKEYEV, Y.A.;  
SOKOLOV, G.A., prof., otv.red.; ZNAMENSKAYA, N.V., red.izd-va;  
GUS'KOVA, O.M., tekhn.red.

[Etyka tin ore deposit in eastern Transbaikalia] Etykinskoe  
olovorudnoe mestorozhdenie Vostochnogo Zabaikal'ia. Moskva, 1969.  
141 p. (Akademiya nauk SSSR. Institut geologii rudnykh mestorozhdenii,  
petrografii, mineralogii i geokhimii. Trudy, no.100) (MIRA 17:3)

1. Chlen-korrespondent AN SSSR (for Levitskiy).

TOMSON, I.N.; IVANOV, I.B.; KONSTANTINOV, R.M.; LOBANOVA, G.M.;  
POLYAKOVA, O.P.

Absolute age of Mesozoic magmatic complexes and ore  
formations in eastern Transbaikalia. Izv. AN SSSR. Ser.  
geol. 28 no.12:31-40 D'63. (MIRA 17:2)

1. Institut geologii rudnykh mestorozhdeniy, petrografii,  
mineralogii i geokhimii AN SSSR, Moskva.

TOMSON, I.N.; KONSTANTINOV, R.M.; POLYAKOVA, O.P.

Genetic series of ore formations in Transbaikalia. Geol rud.  
mestorozh. 6 no.2:38-51 Mr-Ap '64. (MIRA 17:6)

1. Institut geologii rudnykh mestorozhdeniy, petrografii,  
mineralogii i geokhimii AN SSSR, Moskva.

TOMSON, I.N.; KONSTANTINOV, R.M.; POLYAKOVA, O.P.; IVANOV, I.B.;  
YESIKOV, A.D.

Upper Mesozoic hydrothermal cycles in eastern Transbaikalia in  
light potassium-argon and lead-isotope dating. Izv. AN SSSR  
Ser. geol. 29 no.7:3-11 J1 '64 (MIRA 18:1)

1. Institut geologii rudnykh mestorozhdeniy, petrografii, mine-  
ralogii i geokhimii AN SSSR, Moskva.



KONSTANTINOV, R.M.; ZHARIKOV, V.A.; OMEL'YANENKO, B.I.;  
PETROVSKAYA, N.V.; SHATALOV, Ye.T.;

[Study of the characteristics of the distribution of mineralization in metallogenetic research on ore regions; basic principles of metallogenetic research and the compilation of metallogenetic and prognostic maps of ore deposits] *Izucheniye zakonomernostei razmeshcheniya mineralizatsii pri metallogenicheskikh issledovaniyakh rudnykh raionov; osnovnye printsipy metallogenicheskikh issledovaniy i sostavleniya metallogenicheskikh i prognostnykh kart rudnykh raionov.* Moskva, Nedra, 1965. 302 p.  
(MIRA 18:7)

DUBROVSKIY, V.N.; KONSTANTINOV, R.M.

First Expanded Session of the Scientific Council on the Theory  
of the Formation and Distribution of Endogenetic Ore Deposits  
in Siberia and the Far East. Geol. rud. mestorozh. 6 no.5:  
104-110 S-O '64. (MIRA 17:12)

DUBROVSKIY, V.N.; KONSTANTINOV, R.M.

In the meeting of the Department of the Geology of Endogene Ore  
Deposits of the Institute of the Geology of Ore Deposits, Petrology,  
Mineralogy, and Geochemistry of the Academy of Sciences of the U.S.S.R.  
Geol.rud.mestorozh. 7 no.4:102-104 JI-Ag '65.

(MIRA 18:8)

YESIKOV, A.D.; TOMSON, I.N.; KONSTANTINOV, R.M.; POLYAKOVA, O.P.

Isotope composition of ore lead from various type deposits in eastern Transbaikalia. Geokhimiia no.7:791-800 J1 '65.

(MIRA 18:11)

1. Institut geologii rudnykh mestorozhdeniy, petrografii, mineralologii i geokhimiil AN SSSR, Moskva. Submitted June 11, 1964.

**KONSTANTINOV, S., podpolkovnik.**

**Equipment of troop transport trucks. Voen.vest. 36 no.3:86-89**

**Mr '56.**

**(MLRA 9:8)**

**(Motor trucks, Military)**

KONSTANTINOV, S., podpolkovnik.

~~Driving caterpillar tractors. Za rul. no.10:15-16 0 '57.(MIRA 10:11)~~  
(Caterpillar tractors)

KONSTANTINOV, S., glavnyy inzhener.

Letter to the editor. Izv.AN SSSR Otd.tekh.nauk no.5:779-780 My '53.  
(MLRA 6:8)

1. Moskovskiy mashinostroitel'nyy zavod "Borets".  
(Bearings (Machinery)) (D'iachkov, A.K.)

KONSTANTINOV, S., polkovnik

War doctrine of American imperialism. Komm.Voorush.Sil 3  
no.23:79-85 D '62. (MIRA 16:2)  
(United States---Military policy)



KONSTANTINOV, S.

The great council of active workers of the All-Union Chemical  
Society. NTO 6 no.2:12-13 F '64. (MIRA 17:4)

9(9)

AUTHORS:

SOV/142-58-6-13/20  
Shamayev, Yu.M., and Konstantinov, S.G.

TITLE:

Computation of the Relative Sensitivity of a Deflection System With Travelling Waves (Raschet otnositel'noy chuvstvitel'nosti otklonyayushchey sistemy s begushchey volnoy)

PERIODICAL:

Izvestiya vysshikh uchebnykh zavedeniy - Radiotekhnika, 1958, Nr 6, pp 719-723 (USSR)

ABSTRACT:

The article deals with the computation of the dynamic sensitivity of a deflection system with travelling waves (DSTW), in the form of a semi-circular ribbon system, under synchronous and asynchronous conditions of beam motion, without accounting for dispersion and reflection in the system. In oscillographs for use with VHF and short duration video-impulses, ordinary methods of extending the frequency range of the scope mechanism - e.g. shortening the deflection system and/or increasing the deflection voltage - are not adequate because they decrease the sensitivity of the deflection system.

Card 1/4

SOV/142-58-6-13/20

Computation of the Relative Sensitivity of a Deflection System  
With Travelling Waves

Several types of electron beam tubes with travelling waves have been developed, providing broader frequency coverage without loss of sensitivity (see Figure 1), and in which the deflection system is likened to a series of ordinary deflection plates with a short transit time, distributed along the electron beam axis, and connected one to another through a segment of a delay line. Delay time of the input signal wave in DSTW is selected equal to the transit time of an electron between neighboring pairs of deflection plates, which condition is met when the velocities of the electrons and wave (distributed along the deflection system) are equal. The resulting relative sensitivity is approximately equal to the sensitivity of one pair of plates multiplied by their number. The authors then compute the dynamic sensitivity of DSTW without accounting for the re-

Card 2/4

SOV/142-58-6-13/20

Computation of the Relative Sensitivity of a Deflection System  
With Travelling Waves

flected wave, and on the assumption that electromagnetic wave dispersion is absent in the band of frequencies to be registered. A complex plane is used for visual representation of the process of interaction between the electron beam and the travelling wave field (Figure 2). The results of computations for an experimental tube with stated parameters are introduced by way of example. Checking of the formulae used was done with an experimental prototype travelling-wave tube produced by the Moscow Energetics Institute in 1953, using VHF frequencies. The influence of the accelerating voltage on the sensitivity of the tube at a frequency of 3128 mc for computed and experimental conditions are shown in the graph of figure 4. This article was recommended by the Kafedra teoreticheskikh osnov elektrotehniki Moskovskogo

Card 3/4

SOV/142-58-6-13/20

Computation of the Relative Sensitivity of a Deflection System  
With Travelling Waves

ordena Lenina energeticheskogo instituta (Chair  
of the Theoretical Bases of Electrical Engineer-  
ing of the Moscow Order of Lenin **Power** In-  
stitute). There are 2 diagrams, 2 graphs, and 16  
references, 5 of which are Soviet, 8 English, 1  
German, and 2 French.

SUBMITTED: June 16, 1958

Card 4/4

KONSTANTINOV S. G.

<p>М. А. Малов Ученый секретарь научно-технического инженерного совета.</p>	<p>II часть (с 10 до 18 часов)</p>
<p>10 часов (с 10 до 12 часов)</p>	<p>Состояние работы с техникой фототехники устройства СВЧ</p>
<p>В. И. Виноградов, Р. А. Грозовский Техническое задание к проекту аппаратуры для ИИВ.</p>	<p>В. И. Зубов, М. С. Мещков Исследования работы теории параметрических усилителей</p>
<p>С. Г. Константинов Описание работы с фототехникой.</p>	<p>В. И. Тихонов И теория фототехники усилителей.</p>
<p>В. И. Беликов, В. И. Галкин, В. И. Калашников, В. И. Мещков Исследования аппаратуры работы с параметрическими устройствами СВЧ с помощью аппаратуры для измерения теоретических параметров.</p>	<p>В. И. Тихонов, В. И. Дарин, В. И. Корсаков Экспериментальные исследования фототехники усилителей</p>
<p>Г. А. Мещков, В. И. Мещков Техническое задание к проекту аппаратуры для с фототехникой аппаратуры.</p>	<p>А. И. Мещков, В. И. Мещков Исследования работы аппаратуры фототехники усилителей.</p>
<p>20</p>	<p>А. С. Топор И теория параметрических усилителей с помощью аппаратуры.</p>
<p>21</p>	

report submitted for the Confidential Meeting of the Scientific Technological Society of  
Radio Engineering and Electrical Communications Dr. A. G. Popov (VSEI), Moscow,  
6-12 June, 1959

KONSTANTINOV, S.I.; GRISHAYEV, V.D., starshiy inzh.

Brigade of communist labor serving electric interlocking systems.  
Avtom.telem.u svyaz' 4 no.8:23-25 Ag '60. (MIRA 13:8)

1. Nachal'nik otdela signalizatsii, tsentralizatsii i blokirovki sluzhby signalizatsii i svyazi Donetskoy dorogi (for Konstantinov).
2. Otdel signalizatsii, tsentralizatsii i blokirovki sluzhby signalizatsii i svyazi Donetskoy dorogi (for Grishayev).  
(Railroads--Signaling--Interlocking systems)  
(Railroads--Employees)

KONSTANTINOV, Semen Ivanovich; CHUZHOVA, A.P., red.

[Viticulture in Astrakhan Province] Vozdelyvanie vinograda  
v Astrakhanskoi oblasti. Astrakhan', Volga, 1962. 68 p.  
(MIRA 18:3)

ARESHKIN, Grigoriy Ivanovich; GORYACHEV, Vladimir Trifonovich;  
YEVTYUKHIN, Ivan Yegorovich; KONSTANTINOV, Sergey Leonidovich;  
LAVROV, Oleg Mikhaylovich; PERLIN, Vladimir Sergeyevich;  
SEREBRYAKOV, Yuriy Fedorovich; KOSOROTOV, B.V., inzh.-polkovnik  
zapasa, red.; ZUDINA, M.P., tekhn. red.

[Training manual for motor vehicle drivers] Posobie dlia pod-  
gotovki voditelia avtomobilia. Moskva, Voen.izd-vo M-va obor.  
SSSR, 1962. 501 p. (MIRA 15:4)

(Automobile drivers)

(Vehicles, Military)



2

KONSTANT NOV. 5 1938

27

Separation of liquid and solid fat acids. S. M. Konstantinov and I. O. Laryukov. Russ. 34,049, Oct. 31, 1938. Mixts. of such acids as stearic, palmitic and oleic are melted, cooled on rollers, shaved off and the chips pressed.

ASM. S. L. A. METALLURGICAL LITERATURE CLASSIFICATION

Ca

21

Geo generator. S. M. Konstantinov. Russ. 51,287.  
June 30, 1937. Construction details of an app. for gasifi-  
ing fuel in the presence of steam, with molten metal as  
heat-transfer agent.

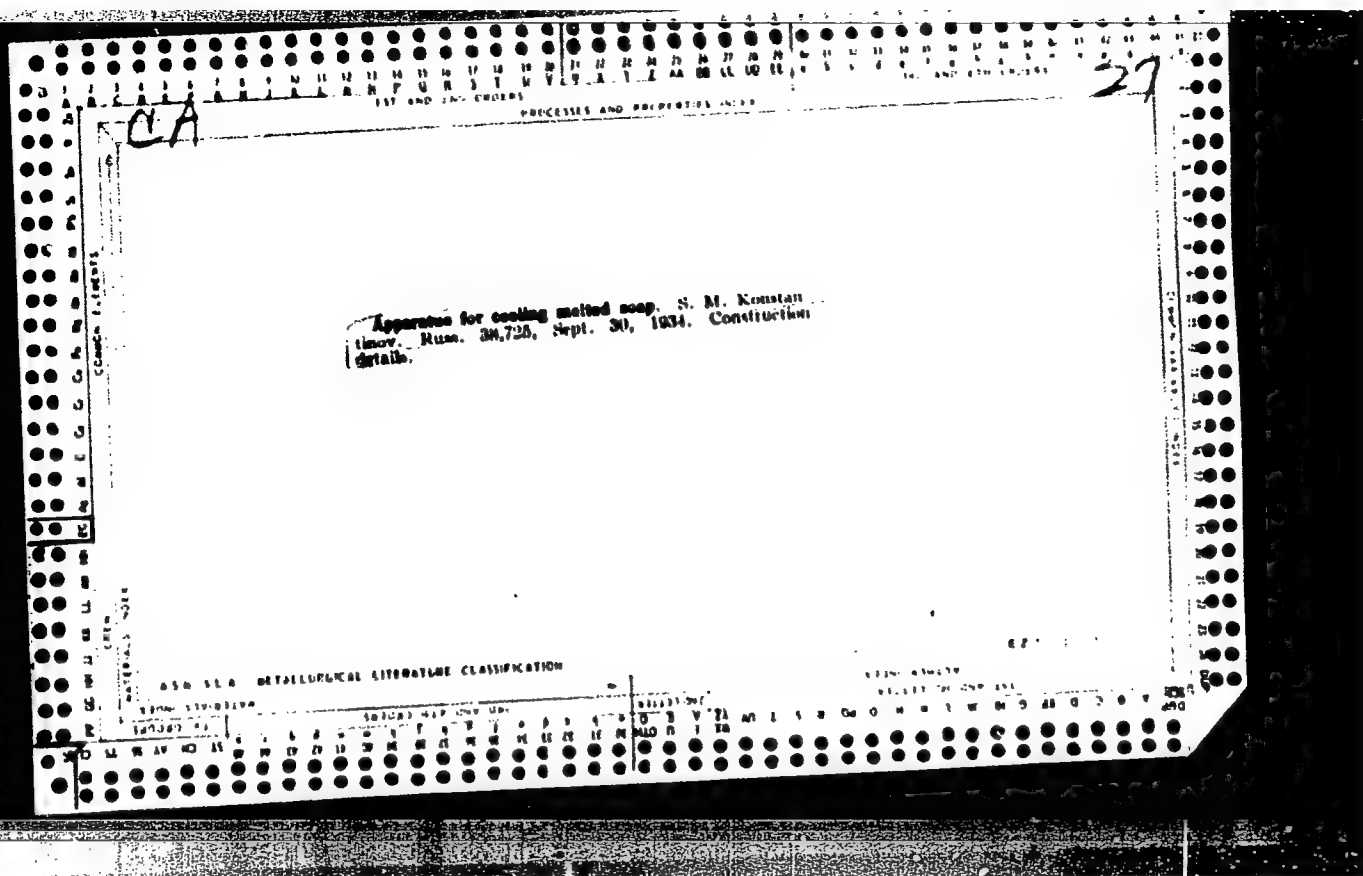
ASB-5LA METALLURGICAL LITERATURE CLASSIFICATION

27

*Handwritten:* 10

**Hydrogenating vegetable oils.** S. M. Konstantinov.  
Russ. 45,029, Nov. 30, 1935. It used in the hydrogenation...  
is preliminarily heated and passed through a slightly  
heated or an unheated oil.

ASSOCIATED METALLURGICAL LITERATURE CLASSIFICATION



KONSTANTINOV, S.M.

Investigating the heat capacity of molasses waste. Izv.vys.ucheb.  
sav.; pishch.tekh. no.1:94-98 '60. (MIRA 13:6)

1. Kafedra teploenergetiki Kiyevskogo tekhnologicheskogo  
instituta pishchevoy promyshlennosti. (Heat capacity)  
(Molasses)

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000824410013

POPOV, V.D.; KONSTANTINOV, S.M.

Viscosity and specific gravity of molasses waste. Spirt.  
prom. 26 no.1:27-30 '60. (MIRA 13:6)  
(Molasses)

KONSTANTINOV, S. M.

Thermal conductivity of molasses waste. Spirt.prom. 26 no.3:13-14  
'60. (MIRA 13:10)

(Distilling industries--By-products)

KONSTANTINOV, S.M.; TOBILEVICH, N.Yu.

Heat transfer during the evaporation of molasses waste. Spirt.  
prom. 27 no.1:28-31 '61. (MIRA 14:2)  
(Molasses) (Heat—Transmission)

KONSTANTINOV, S.M.

Experimental investigation of the surface tension of molasses  
waste. Izv. vys. ucheb. zav.; pishch. tekhn. no.3:130-131 '60.  
(MIRA 14:8)

1. Kiyevskiy tekhnologicheskii institut pishchevoy promysh-  
lennosti, Kafedra teploenergetiki.  
(Molasses) (Surface tension)



KONSTANTINOV, S.M.

Studying heat transfer to boiling molasses' distillery wastes in a circuit with natural circulation. Izv.vys.ucheb.zav.; pishch. tekhn. no.3:87-91 '62. (MIRA 15:7)

1. Kiyevskiy tekhnologicheskoy institut pishchevoy promyshlennosti, kafedra teploenergetiki. (Heat—Transmission) (Distilling industries)

POPOV, V.D., doktor tekhn.nauk, prof.; KONSTANTINOV, S.M., inzh.

Generalization on some experimental data on heat transfer during the boiling of some liquids and aqueous solutions. Izv. vys. ucheb. zav.; energ. 5 no.7:70-78 J1 '62. (MIRA 15:7)

1. Kiyevskiy tekhnologicheskij institut pishchevoy promyshlennosti. Predstavlena kafedroy teploenergetiki.  
(Heat--Transmission)

POPOV, V.D.; KONSTANTINOV, S.M.; DEMCHUK, G.S.

Results of the thermal testing of the evaporation station for  
vinasse. Trudy KTIPP no.25:9-12 '62. (MIRA 16:5)  
(Evaporating appliances—Testing)

KONSTANTINOV, S.M.

Studying heat exchange in the boiling of vinasse. Trudy KTIPP  
no. 25:83-87 '62. (MIRA 1615)  
(Evaporating appliances) (Heat-Transmission)  
(Molasses)